VLR - 8/18/93 NPS Form 10-900

(Oct. 1990)

OMB No. 10024-0018

United States Department of the Interior National Park Service

#### National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property			
historic name <u>VARNEY'S FALLS DAM</u> other names/site number <u>DHR File #</u>	11-68 (part of Jam		
O Location	Historic Di	strict sys	stem. #127-171)
2. Location			
street & number <u>1 mi. east of int.</u>	of Rtes. 608 and	609	NZAnot for publication
city or town <u>Gilmore Mills</u>			🔀 vicinity
state <u>Virginia</u> code <u>VA</u>			
3. State/Federal Agency Certification			
As the designated authority under the National Hist     request for determination of eligibility meets the Historic Places and meets the procedural and profe     meets	e documentation standards for registressional requirements set forth in 36 criteria. I recommend that this propertinuation sheet for additional commendational commendation	ering properties in CFR Part 60. In merty be considered ents.)  Resources	the National Register of my opinion, the property significant
Signature of certifying official/Title	Date		
State or Federal agency and bureau			
1. National Park Service Certification			
hereby certify that the property is:	Signature of the Keeper		Date of Action
☐ entered in the National Register. ☐ See continuation sheet.			
☐ determined eligible for the National Register ☐ See continuation sheet.			
determined not eligible for the National Register.			
removed from the National Register.			
other, (explain:)			

### VARNEY'S FALLS DAM Name of Property

### Botetourt Co. VA County and State

				5. Classification	
ty he count.)	sources within Property evicusly listed resources in the	Number of Res (Do not include pre	Category of Property (Check only one box)	Ownership of Property (Check as many boxes as apply)	
	Noncontributing	Contributing	☐ building(s)	🙀 private	
buildings	0		☐ district	public-local	
sites		0	☐ site 뎙 structure	<ul><li>public-State</li><li>public-Federal</li></ul>	
structures		3	🗖 object	— <b>, , , , , , , , , , , , , , , , , , ,</b>	
objects					
Total	0	3			
reviously listed	ntributing resources pre I Register	Number of con in the National	roperty listing of a multiple property listing.)	Name of related multiple p (Enter "N/A" if property is not part	
		N/A	<del></del>	N/A	
				6. Function or Use	
		Current Functions (Enter categories from		Historic Functions (Enter categories from instructions)	
	<u> </u>	NOT IN USE	water-related	TRANSPORTATION: water-related	
	<u> </u>				
		<del></del>			
	·				
				7. Description	
	instructions)	Materials (Enter categories from i		Architectural Classification (Enter categories from instructions)	
		foundation	OTHER: stone lock		
	imestone	walls <u>STONE: 1</u>			
		roof			
		other			
_	imestone	(Enter categories from information walls STONE: 1.		7. Description Architectural Classification (Enter categories from instructions)	

Narrative Description (Describe the historic and current condition of the property on one or more continuation sheets.)

#### VARNEY'S FALLS DAM

Name of Property

### Botetourt County, VA County and State

8. S	tatement of Significance			
Applicable National Register Criteria (Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)		Areas of Significance (Enter categories from instructions)		
101 114	monal negisier listrig.)	ENGINEERING		
⊑ <sub>X</sub> A	Property is associated with events that have made a significant contribution to the broad patterns of our history.	TRANSPORTATION		
□в	Property is associated with the lives of persons significant in our past.			
<u>∵</u> KC	Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.	Period of Significance		
<u> </u>	Property has yielded, or is likely to yield, information important in prehistory or history.			
	ria Considerations "x" in all the boxes that apply.)	Significant Dates N/A		
Prope	erty is:			
<u> </u>	owned by a religious institution or used for religious purposes.			
_ в	removed from its original location.	Significant Person (Complete if Criterion B is marked above)  N/A		
_ c	a birthplace or grave.	**//.**		
<u>_</u> D	a cemetery.	Cultural Affiliation N/A		
□E	a reconstructed building, object, or structure.			
□F	a commemorative property.			
⊏ G	less than 50 years of age or achieved significance within the past 50 years.	Architect/Builder Scott, Charles		
	ntive Statement of Significance in the significance of the property on one or more continuation sheets	s.)		
9. Ma	ajor Bibliographical References			
Bibilo	ography ne books, articles, and other sources used in preparing this form on o	one or more continuation sheets.)		
Previ	ous documentation on file (NPS):	Primary location of additional data:		
	preliminary determination of individual fisting (36 CFR 67) has been requested previously listed in the National Register previously determined eligible by the National Register designated a National Historic Landmark recorded by Historic American Buildings Survey	☐ State Historic Preservation Office ☐ Other State agency ☐ Federal agency ☐ Local government ☐ University ☐ Other  Name of repository: Va. Dept. of Historic Resources, 221 Governor St., Rich-		
	#recorded by Historic American Engineering Record #	mond, VA 23219		

Name of Property	County and State
10. Geographical Data	
Acreage of Property <u>approx 61 acres</u>	
UTM References (Place additional UTM references on a continuation sheet.)	
1 1 7 6 2 4 5 0 0 4 1 6 0 5 0 0  Zone Easting Northing 2 1 7 6 2 4 5 3 0 4 1 6 0 4 8 0	3 17 6 2 3 8 8 0 4 1 5 9 1 0 6 2 3 2 0 0 4 1 6 0 6 0 6
Verbal Boundary Description (Describe the boundaries of the property on a continuation sheet.)	
Boundary Justification (Explain why the boundaries were selected on a continuation sheet.)	
11. Form Prepared By	
name/title Dianne Pierce. Historic Preservati	on Consultant
organization	date
street & number 10056 Hobbyhill Road	telephone <del>(804)272-5502</del>
city or town Richmond	state <u>VA</u> zip code <u>23235</u>
Additional Documentation	
Submit the following items with the completed form:	
Continuation Sheets	
Maps	
A USGS map (7.5 or 15 minute series) indicating the proper	erty's location.
A Sketch map for historic districts and properties having la	rge acreage or numerous resources.
Photographs	
Representative black and white photographs of the prope	rty.
Additional items (Check with the SHPO or FPO for any additional items)	
Property Owner (Complete this item at the request of SHPO or FPO.)	
Dr William Davis	
name, ROCKDTIGGE COTPO	
street & number 1500 North Wilmot, Suite 290	telephone <u>(602) 886-4039</u>
city or town Tucson	state <u>A7.</u> zip code <u>85712.</u>

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Projects (1024-0018), Washington, DC 20503.

# National Register of Historic Places Continuation Sheet

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VARNEY'S FALLS DAM Botetourt County, VA

#### SUMMARY DESCRIPTION

The lock and dam abutment at Varney's Falls is a massive limestone structure in a remarkable state of preservation. The lock chamber, one hundred feet long between gate recesses, fifteen feet wide, and approximately twenty-two feet from the top on the upriver end to ground level, is largely clear of debris. The lock and dam abutment structures, together with the remaining towpaths, canal bed, berm bank, towpath culvert and remnants of a towpath bridge, comprise a section of the James River and Kanawha Canal largely untouched by time and an important remnant of what was once the most important mode of transportation and commerce in central Virginia. The lock, guard wall, and dam abutment comprise one structure; the other two contributing structures are the towpath culvert and the remains of the towpath bridge.

#### ARCHITECTURAL ANALYSIS

The Varney's Falls dam and associated structures were built between 1848 and 1851. The locks at the dams along the James River were built to prevent high water from flooding over into the canal below. They normally did not lift the boats as the other locks did but served only to pass the boats through. They also provided a controlled flow of the water into the canal downriver.

The guard lock, made of local grey limestone, along with the dam, were built according to the plans and specifications of the engineers of the James River and Kanawha Canal company. The lock chambers were all the same width (fifteen feet) and length between the gates (one hundred feet), but the height, wall thickness and overall length varied. The dams likewise varied in height and length, as did the abutments and guard walls, depending on the particular site.

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VARNEY'S FALLS DAM Botetourt County, VA Architectural Analysis (cont.)

The side walls of the chamber of the lock at Varney's Falls, which have rounded wing walls at both the upstream and downstream ends, are approximately ten feet thick at the bottom and three feet thick at the top. The stone is dressed and coursed ashlar, decreasing in the thickness of the courses from bottom to top. The coping stones are thinnest of all, and rounded into the chamber. The chamber is one hundred feet long from the lower end of the upriver gate recess to the lower end of the downriver gate recess, with a total length of approximately 140 feet. It is fifteen feet wide. The chamber is about twenty-two feet deep at the upriver end, and steps downseven courses of stone approximately twenty feet downstream of the upper gate recess. The higher level of the lock at the upriver end was to help prevent flood waters from washing over the top of the lock. The four gate recesses, two at each end, are ten feet long and approximately twelve inches deep.

Many of the stones of the lock chamber retain mason's marks from the workers who dressed the stones at the quarry. These marks, some of which are found in several places, range from a simple "A" to a series of interlocking triangles. The mason's marks, together with the high quality of the stonework in general, indicate a highly trained labor force.

The stones for the lock and dam structure, after being cut and dressed in the quarry, were moved to the lock site by boat, or on horse-drawn wagons or sleds. The stones were hoisted into place using a system of derricks, ropes, and pulleys. The mortar used in the narrow joints was made from a hydraulic cement, and was waterproof once it set up.

The Varney's Falls guard lock worked using double wooden gates, one on each side, at each end of the chamber. The gates, made of heavy timbers, covered with heavy planks, were the full height of the lock. The rounded hinge post at the downriver side of each gate rested on a hinge pin at the bottom. A metal strap around the top was fastened to the stone wall and held the gate upright. This rounded post fit closely into the concave stone, called a hollow

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VARNEY'S FALLS DAM Botetourt County, VA Architectural Analysis (cont

quoin, to make a seal at the hinge point. A long, heavy, square wooden beam, known as a balance beam, extended out from the top of the gate to help balance the weight of the gate and act as a long lever to make the gates easy to open and close. When open, the gates on either side fit into the gate recesses to clear the way for the boats going in or out. When closed they met in a V pointing upstream to resist the water pressure. Small wicket gates at the bottom of each gate, operated by a small screw crank, allowed the water to flow in or out to equalize the pressure so the gates could be opened or closed. Although the wooden gates were removed by the railroad company in 1885, indentations in the top of the hollow quoin coping stones still indicate where the iron straps secured the gates' wooden hinge posts in place.

Just above the upriver gate recesses and just below the downriver ones, are slots in the stone six inches deep, six inches wide, and approximately fifteen feet high (slightly higher on the west side). Wooden planks were inserted into the slots to hold back the water during the and repair or replacement of the gates.

The dam at Varney's Falls was a crib dam, made of wood, in an Aframe design infilled with rock. Two rows of heavy timbers were bolted to the rock in the river bed, with the timber frame constructed on top. The frame was covered with heavy planking, infilled with loose rock for stability. The upper side was covered with gravel to seal the cracks. The riffle caused by the upper line of timbers in the river bed may still be seen running straight across the river; the shallow rock ledge called Varney's Falls runs at a northeast/southwest angle across the river, the far side being downriver from the dam.

The Varney's Falls dam itself, built according to the engineers' plans and specifications, was according to the Engineer's Report of November 11, 1851, eighteen feet high, with a base twenty-four feet wide, and its length was 488.5 feet between abutments. The abutment on the west side of the river was a ledge of rock at the water's edge. This abutment was cut away when the present Norfolk

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VARNEY'S FALLS DAM Botetourt County, VA Architectural Analysis (cont.)

and Western Railroad was built. The east side abutment has a guard wall 83 feet long joining it to the head of the guard lock. This wall, built of the same limestone as the lock, is uncoursed rough ashlar, although its coping stones are smoothly finished and radiused at the top on the upriver side. The wall is approximately ten feet thick at the base, rising in a series of stepbacks on the downriver side. The north abutment runs parallel to the river and the lock chamber, and at right angles to the stepped wall, extending downriver from the guard wall.

The dam abutment on the east side actually consists of two separate walls, one a continuation of the guard wall to the lock, and the other, shorter one standing in the river. Between them, at a width of approximately seven feet, is the infilled river lock. navigable passage was left open during the construction of the lock and dam. to allow uninterrupted traffic of the river by batteaux during the construction period. The river lock, because of its narrow width, had only a single gate at each end. (The river lock was much longer originally, with a gate at each end. part was torn out after the dam was finished so only one gate When the dam and guard lock were completed, in recess remains.) October, 1852, the upper end was closed with stone to match the slopes of the wooden dam. On the upriver side the finished stone has washed out. but on the downriver side the stone is coursed and dressed.

At the same time that the lock and dam were built, the low-lying ground between the towpath and the hillside approximately two hundred feet to the west was infilled, creating a large berm to prevent the river from washing around the lock.

The towpath, still very evident at Varney's Falls, ran on the river side of the canal downstream of the lock. It then crossed over the lock via a wooden bridge at the lower end of the lock below the lower set of gates. The horses pulling the boats continued on the towpath on the opposite side of the lock as it ran upriver. A close examination of the stones at the ends of the chamber shows

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VARNEY'S FALLS DAM Botetourt County, VA

Architectural Analysis (cont.

places near the top where the tow ropes caught and rubbed grooves called "rope burns". Approximately seventy-five feet upstream of the lock is a stone culvert under the towpath, used to drain the low grounds into the river. The culvert is laid on a timber foundation, in a rectilinear form with a stone lintel across the top.

Approximately one and one-eighth miles upstream from the lock, the towpath crossed the bed of a creek entering the river (where Route 609 now makes a sharp turn to run along the river). At this point, one of the stone abutments of a wooden towpath bridge is evident on the east side of the creekbed. The stone used was the same limestone as the lock, and it was similarly dressed and laid up.

The Varney's Falls Dam stone structures are considered to be the most substantial and best-preserved of those built on the Second Division of the canal, from Lynchburg to Buchanan. Although the wooden dam was destroyed by the railroad in 1881, the stonework remains virtually complete. Only a few of the upper stones at the upper end of the lock have fallen into the lock chamber. The wooden gates with their hardware were removed in 1885 by the railroad company. Debris and vegetation have been periodically removed from the lock chamber and canal bed, leaving them picturesque and in excellent condition.

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VARNEY'S FALLS DAM Botetourt County, VA

#### ENDNOTES

- 1. Interview with T. Gibson Hobbs, Jr., James River and Kanawha Canal historian, November 17, 1992.
- 2. Unless the lock is built on solid bedrock, it has a timber foundation under the walls and chamber bottom, with a wooden floor on top of the foundation in the chamber. (Interview with William E. Trout, III, Virginia Canals and Navigations Society, August 21, 1992.)
- 3. Hobbs interview.
- 4. <u>ibid.</u>
- 5. Trout interview.
- 6. Hobbs interview.
- 7. According to William Trout, visible examples of towpath bridges are very rare on the James River and Kanawha Canal. (Trout interview.)

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VARNEY'S FALLS DAM Botetourt COunty, VA

#### STATEMENT OF SIGNIFICANCE

The Varney's Falls Dam, with its remaining guard lock, guard wall, and dam abutment, completed in 1851, comprise the best-preserved of the several such structures built by the James River and Kanawha Company in the fifty-mile stretch of canal between Lynchburg and Buchanan on the James River. The Varney's Falls structure exemplifies the skill required to construct the canal from Richmond to Buchanan and beyond. The still-evident towpath on the upper and lower ends of the lock is a rare survivor of the canal system. Also part of the Varney's Falls Dam property is a stone towpath culvert and the stone abutment of a towpath bridge, both upriver from the lock.

#### HISTORICAL BACKGROUND

The James River's importance as a route of exploration, settlement, and commerce dates to the earliest years of Virginia's history. The difficulties in navigating the river, along with its frequent floods, caused the early settlers to envision a system of canals to aid settlement, commerce, and travel. The James River Company, formed in 1785, was primarily a river navigation company with only short canals around the worst rapids. Because this was not a satisfactory arrangement, the James River and Kanawha Company was organized in 1835 to build a canal from Richmond to the Ohio River. Later this scheme was altered: a turnpike was constructed that linked the James RIver with the Kanawha River, which flowed to the Ohio River. By 1851 the company had completed what was to be the final extent of the canal, from the canal basin at Richmond upriver to Buchanan. The canal as a means of transportation and commerce greatly enhanced both the settlement and prosperity of the greater James River Valley. In its heyday between 1850 and 1860, the canal company was the most powerful corporation in Virginia.

To raise funds through the sale of subscriptions to landowners along the canal route, the canal company stressed the benefits of

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VARNEY'S FALLS DAM Botetourt County, VA Historical Background (cont.)

the canal to aid the farmers of the river valley:

a direct and safe conveyance to a market in your neighborhood will be furnished for the produce of your labor, and you will participate with your sister states in the rich commerce with the west. All who hold property near this line of intercourse, or live near it, have irresistible motives to aid it.

Although many landowners along the river subscribed, often they did not remit any cash, and as the project stretched beyond its estimated completion date, they lost interest and their investment was never realized.

The Varney's Falls Dam with its guard lock was one of seven such wooden dams, along with four stone dams, completed during the building of the so-called Second Division of the canal, from Lynchburg to Buchanan. The work on this section was under the supervision of engineers Robert W. Tomlin, James M. Harris, and Edward Lorraine, with Walter Gwynn as Chief Engineer. The contract for this lock and its associated dam structure was let on August 18, 1848, to Charles Scott of Lynchburg, who also built the Indian Rock Dam, the next upriver from Varney's Falls. Although the contract called for completion of the lock and dam by December 1, 1849, the structure was not actually complete until 1851. Four of these wooden dams were completed between Glasgow and Buchanan at a total cost of \$152,602, or less than \$40,000 each.

Since each contractor hired by the canal company subcontracted his own labor, the types of laborers varied. Much of the early work on the canal and its associated structures was done by Scottish and Irish workers as well as by slave labor. By the time the work progressed upriver beyond Lynchburg, largely local labor was hired. This included the leasing of slaves from local landowners. Richard H. Burks, the owner of the large estate now known as Alpine Farms

## **National Register of Historic Places Continuation Sheet**

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VARNEY'S FALLS DAM Botetourt County, VA Historical Background (cont.)

and its manor house. Annandale, owned the land upon which Varney's Falls and two other locks were located. Burks was a substantial slaveowner and may well have leased some of his laborers to Charles Scott. It is likely, however, that at least some of the labor used to build the Varney's Falls lock consisted of skilled workers, since a large number of mason's marks, normally a sign of a trained stone mason, remain in the stones in the lock chamber.

The plans and specifications for the dams, with their guard locks, were prepared by the canal company engineers. The basic dimensions were the same for all the stone guard locks. The limestone for the Varney's Falls Dam structures was quarried locally, and the hydraulic cement for the mortar was supplied by either the Rocky Point cement mill above the dam, or by the larger Point Cabell mill just below the Maury River, both operated by Charles H. Locher. Each lock had a lockkeeper, who lived in a modest house built by the company, usually close to the lock. The first lockkeeper at Varney's Falls was John F. Hicks, who was paid \$150 per year for his oversight of the business of the lock. The lockkeeper's house does not survive at Varney's Falls.

Although the period from the completion of the canal to Buchanan in 1851 until the beginning of the Civil War, a decade later, was the zenith for the canal in terms of traffic and revenues, the James River and Kanawha Company was also beset by problems in this period. Not the least of these were the not infrequent floods, or freshets, as they were called in the records.

One such freshet in November 1852 caused considerable damage to the property of Richard H. Burks, who made a settlement with the canal company for damages incurred in that and other floods in an agreement dated September 20, 1853. The following year eight days of repair were required to repair a "breach" on Burks's land and a section of washed-out towpath. Burks sent a crew of workers to help with the repairs an indicator of the importance of the canal to his own prosperity as a significant area farmer.

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VARNEY'S FALLS DAM Botetourt County, VA

Historical Background (cont.)

To reduce future flood damage, in 1876 the company raised the bank of the towpath below the Varney's Falls Dam by two feet for a length of 900 feet, and made a rip-rap (loose broken stone) wall 628 feet long, twenty-six feet high, and three feet thick, in addition to riprapping more of the bank with broken stone, 750 feet long, ten feet wide, and two feet thick.

The sizable amount of the initial canal construction not covered by stock subscriptions, plus the regular payrolls, maintenance, and repairs to the canal, brought the James River and Kanawha Company to a point of near-bankruptcy on the eve of the Civil War. The war itself was disastrous to the company and the canal. The Confederacy conscripted many freight boats and used the canal for moving soldiers and supplies at one-quarter the normal tolls, so that revenues fell off sharply. In 1865, Major General Philip H.Sheridan destroyed much of the works of the company from Scottsville to within thirty miles of Richmond. By the end of the war, much of the canal lay in disrepair or ruins, and there were no local funds to repair it. While efforts were being made to bring in federal money, the flood of 1877, the worst of the century, dealt the canal its final blow. Over \$200,000 damage was inflicted on the works of the canal, especially above Lynchburg.

Meanwhile, much of the canal's former traffic went to the burgeoning railroads, which were increasingly seen as the future of commerce in the James River valley as elsewhere. In 1880 the assets of the canal company were purchased by the Richmond and Alleghany Railroad Company, which laid its tracks largely on the towpath of the canal. The railroad line reached the Varney's Falls dam on April 1, 1881, but the tracks at this point were laid on the higher ground to the west, leaving the towpath and canal bed intact. Since this dam was not needed for water power, and to prevent having to maintain it, it was one of the first destroyed by the railroad company in 1881. The wooden dam structure traversing the river was pulled out, but all the massive associated stone structures remained intact. The gates of all the old locks,

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VARNEY'S FALLS DAM Botetourt County, VA Historical Background (cont.)

including Varney's Falls, were removed in 1885. 17

The guard lock and dam abutment structures at Varney's Falls remain in excellent condition. The towpath culvert retains its original stones, although a few have shifted out of place. The towpath itself is still quite evident, both above and below the lock. One and one-eighth miles away, the remains of the towpath bridge are less distinct but nevertheless significant for the rarity of their survival.

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VARNEY'S FALLS DAM Botetourt County, VA

#### **ENDNOTES**

- 1. Ann Woodlief, <u>In River Time: The Way of the James</u> (Chapel Hill, NC: Algonquin Books of Chapel Hill, 1985), page 96.
- Wayland Fuller Dunaway, <u>History of the James River and Kanawha Company</u> (New York: 1922, Reprinted by AMS Press, 1969), page 183.
- 3. From an address by Chief Justice John Marshall, a supporter of the canal project, who acted as superintendent of subscriptions, as quoted by Dunaway, pages 101-102.
- 4. Dunaway, p. 112.
- 5. "Annual Report of the President to the Stockholders of the James River and Kanawha Company" (Richmond: Shepherd and Colin, 1848).
- 6. The President's Report to the Stockholders for 1848 discusses the problematic labor shortage facing the contractors as they moved up the river. Due to the remote location of the work and a perceived concern about a harsh climate, fewer laborers were available to work on the Second Division. Nevertheless, the President reported, slave labor had been used "extensively at good prices". In the 1849 report, it was commented that slave labor was effective after a two to three month training in quarrying, drilling, and cutting the stone.
- 7. Gibson Hobbs comments that "[Chief Engineer] Gwynn trained a number of slaves as masons and the crude marks here make me think they did some of the masonry work here." (Hobbs interview.)
- 8. Hobbs interview.
- 9. During and after the Civil War, the lockkeeper was George W. Tyree, whose yearly salary ranged widely, due to wartime inflation and then to severe funds shortages after the war. (Director's Reports.)

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VARNEY'S FALLS DAM Botetourt County, VA Endnotes (cont.)

- 10. The location of the lockkeeper's house is not known; however, it can be speculated to be west of the lock, at the base of the hill, where the Chesapeake and Ohio Railroad tracks are now located. This situation, approximately 150 feet away from the lock, would have been unusually far from the lock, as most lockkeeper's houses were within twenty or thirty feet. (Hobbs interview.) The land between the lock and the railroad bed was infilled at the time the lock was onstructed, and it is possible that the house was in this land, nearer the lock.
- 11. Deed Book 33, page 174.
- 12. President's Report to the Stockholders, 1854.
- 13. Dunaway, pages 189 and 205.
- 14. <u>ibid</u>.
- 15. ibid., page 230.
- 16. President's Report to the Stockholders of the Richmond and Allegheny Railroad, 1881.
- 17. ibid., 1885.

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VARNEY'S FALLS DAM Botetourt County, VA

#### **BIBLIOGRAPHY**

Annual Reports of the President to the Stockholders of the James River and Kanawha Company, 1848-1881.

Annual Reports of the President to the Stockholders of the Richmond and Allegheny Railroad, 1881-1888.

Deed Book 33, page 174.

- Dunaway, Wayland Fuller. <u>History of the James River and Kanawha</u> Company. New York: 1922; Reprinted by AMS Press, 1969.
- Druyvesteyn, Kent. "With Great Vision: The James River and Kanawha Canal, A Pictorial Essay." <u>Virginia Cavalcade</u>. Winter, 1972.
- Interview with T. Gibson Hobbs, Jr., James River and Kanawha Canal Historian, November 17, 1992.
- Interviews with William E. Trout, III, Virginia Canals and Navigation Society, August 21, 1992 and December 4, 1992.
- Woodlief, Ann. <u>In River Time: The Way of the James.</u> Chapel Hill, N.C.: Algonquin Books of Chapel Hill, 1985.

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VARNEY'S FALLS DAM Botetourt County, VA

#### VERBAL BOUNDARY DESCRIPTION

Beginning at UTM reference point A: 17/624500/4160500 on the east side of the Chesapeake and Ohio Railroad right-of-way thence ESE some 100' to UTM reference point B: 17/624530/4160480 on the west bank of the James River, thence southerly and westerly along the west and north bank of the river some 6400' to UTM reference point C: 17/623880/4159100, thence NNE some 500' to UTM reference point D: 17/623200/4160600 on the south side of the Chesapeake and Ohio Railroad right-of-way, thence easterly and northerly along the south and east side of the right-of-way some 6700' to the point of beginning.

#### BOUNDARY JUSTIFICATION

The property enclosed by the above boundaries encompasses the three canal-related structures of the Varney's Falls Dam vicinity: the dam/guard lock, the towpath culvert, and the towpath bridge. Included as well is the canal bed downriver from the lock until it joins the railroad bed, as well as the towpath from the towpath bridge downriver to the end of the remains of the canal bed. The land between the railroad bed and what is now the bank of the James River also includes the embankment built in the nineteenth century between the lock and the hillside to the west.

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#### **PHOTOGRAPHS**

All photographs are of:

VARNEY'S FALLS DAM Botetourt County, VA

DHR File #11-68

Credit: Dianne Pierce
Date: 1992
Negatives Filed: VA State Library, Richmond, VA

- VIEW OF: Lock chamber, downriver end: view looking south, with towpath at left.
   NEG. NO.: 12744
   PHOTO 1 of 9
- VIEW OF: Lock chamber, upriver end: view looking north.
   NEG. NO.: 12745
   PHOTO 2 of 9
- 3. VIEW OF: Guard wall and upriver end of lock chamber; view looking southwest.
  NEG. NO.: 12745
  PHOTO 3 of 9
- 4. VIEW OF: Gate recesses, upriver end of lock chamber: view looking southwest.
  NEG. NO.: 12745
  PHOTO 4 of 9
- 5. VIEW OF: Dam abutment, river lock, and guard wall, downriver side; view looking northwest.
  NEG. NO.: 12745
  PHOTO 5 of 9

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Photo Key (cont.)

6. VIEW OF: Mason's mark, lock chamber; view looking east. NEG. NO.: 12744
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- 7. VIEW OF: Towpath, upriver from lock and dam; view lookin northeast.
  NEG. NO.: 12743
  PHOTO 7 of 9
- 8. VIEW OF: Towpath culvert, east side; view looking west. NEG. NO.: 12743
  PHOTO 8 of 9
- 9. VIEW OF: Remains of towpath bridge, west side; view lookin east.
  NEG. NO.: 12746
  PHOTO 9 of 9





